

Vitamin D supplements found to be safe for healthy pregnant women

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Use of vitamin D supplements during pregnancy has long been a matter of concern but now researchers writing in the *Journal of Bone and Mineral Research* report that even a high supplementation amount in healthy pregnant women was safe and effective in raising circulating vitamin D to a level thought by some to be optimal. The study also found no adverse effects of vitamin D supplementation, even at the highest amount, in women or their newborns.

The research team, led by Dr. Bruce Hollis from the Medical University of South Carolina in Charleston, used a [randomized controlled trial](#) with healthy expectant mothers to discover how varying dosages of daily supplements could safely sustain a circulating [vitamin D](#) level of at least 32 [nanograms](#) per milliliter.

"Vitamin D supplementation during [pregnancy](#) remains controversial largely due to severe misconceptions about the potential harm it may cause to the fetus," said Dr Hollis. "Surprisingly the scientific debate has made little progress since Dr. Gilbert Forbes made a recommendation of 200 IU (international units) per day in 1963, which was based on a hunch."

While the threat of vitamin D during pregnancy has remained little known, it has been established that the vitamin plays a role in homeostasis, the body's internal regulation, during pregnancy and that a deficiency can effect immune, pancreatic and cardiovascular systems.

Dr Hollis' team monitored the pregnancies of 350 women, from a variety of ethnic and socio-economic backgrounds, who were all between 12 and 16 weeks into gestation. The women were randomly assigned to one of three groups. One group received 400 IU of vitamin D per day, the second group received 2,000 IU per day and the third received 4,000 IU daily.

The team found that women who received the highest level of supplementation (4,000 IU per day) were more likely to achieve and sustain the desired level of circulating levels of vitamin D throughout their pregnancy. Moreover, the researchers found that pregnant women who received lower levels of vitamin D supplementation did not attain the threshold circulating level of the vitamin.

"In our study subjects, a daily dosage of up to 4,000 IU of vitamin D was required to sustain normal metabolism in pregnant women," concluded Dr Hollis. "Furthermore, following decades of speculation into its safety our research has demonstrated vitamin D supplementation to be both safe and effective."

Provided by Wiley

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